

Date: Wednesday, 11/03/2009 9:53:18 AM
User: Chantal Lavoie

Process Sheet

Split-2

Customer : CU-DAR001 Dart Helicopters Services
Job Number : 46411 -3
Estimate Number : 10034
P.O. Number :
This Issue : 11/03/2009 S.O. No. :
Prsht Rev. : NC
First Issue : // Type : PURCHASED PARTS
Previous Run : 34874
Written By :
Checked & Approved By : CLO9103/11
Comment : Est. A: 01.05.04 New Issue EC

Drawing Name : SADDLE BILLET
Part Number : D6101005
Drawing Number : D6101 REV A
Project Number : N/A
Drawing Revision : A
Material :
Due Date : 18/09/2009

Qty: 300 Um: Each

50

Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 PG

PURCHASING



Comment: PURCHASING

- Issue P/O: 8393
a) Description: Alluminum billet
b) 5.00" x 8.250" x 2.50" thick
c) Tolerance on all dimensions are +0.030"/-0.000"
d) Grain direction along 5.00" length
e) Material: 7075-T7351 (QQ-A-250/12)
f) Material certification required

CLO9103/13

300

2.0

D6101005P

7075-T7351 8.25X5.0X2.5



Comment: Qty.: 1.0000 Each(s)/Unit Total: 300.0000 Each(s)
7075-T7351 8.25X5.0X2.5

3.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage
Ensure material certification is attached

50
50

88 09/06/10 09/04/02

4.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Ensure Material certification comply to Dwg D6101

09/06/10 50

Date: Wednesday, 11/03/2009 9:53:18 AM
User: Chantal Lavoie

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE BILLET

Job Number: 46411

Part Number: D6101005

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

inf 09/09/04

50

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/10/05

Job Completion



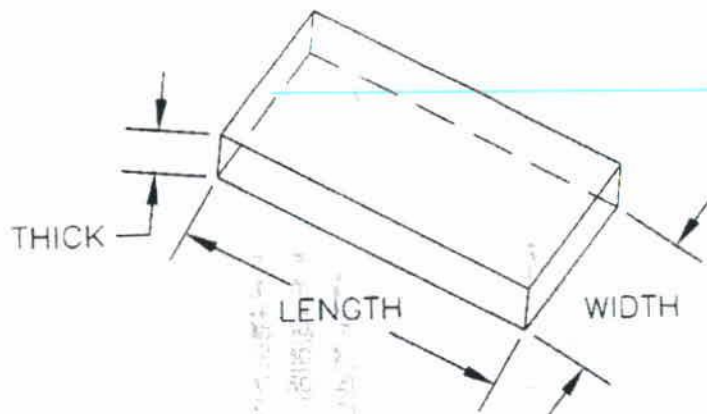
09/10/02



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>AS</i>	DRAWING NO. D6101	Rev A SHEET 1 OF 1
DATE 01.03.30		TITLE SADDLE BILLET, 7075	SCALE NTS
A	01.03.30	NEW ISSUE	

SPECIFICATION CONTROL DRAWING

RELEASE
01.04.23 *AF*



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 46411

PURCHASE MATERIAL ACCORDING TO THE FOLLOWING TABLE. SPECIFY ALLOY, LENGTH X WIDTH X THICK (+0.030/-0.000), AND GRAIN DIRECTION AS SHOWN.

TOLERANCES ON ALL DIMENSIONS ARE +0.030/-0.000.

ALL DIMENSIONS ARE IN INCHES.

Part No.	Alloy	Length	Width	Thick	Grain Direction
D6101-001	7075-T7351 (QQ-A-250/12)	6.000	6.250	2.000	Along 6.000 Length
D6101-003	7075-T7351 (QQ-A-250/12)	7.875	6.250	2.000	Along 7.875 Length
D6101-005	7075-T7351 (QQ-A-250/12)	5.000	8.250	2.500	Along 5.000 Length
D6101-007	7075-T7351 (QQ-A-250/12)	7.750	8.250	2.500	Along 7.750 Length
D6101-009	7075-T7351 (QQ-A-250/12)	8.700	8.250	2.500	Along 8.700 Length
D6101-011	7075-T7351 (QQ-A-250/12)	9.700	8.250	2.500	Along 9.700 Length
D6101-013	7075-T7351 (QQ-A-250/12)	10.100	8.250	2.500	Along 10.10 Length

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**Castle Metals®**

A. M. Castle & Co.

BORDEREAU DE MARCHANDISES

Page 1 of 1

No de Formulaire d'Emballage / Pack Slip No:2822042

Expédié de / Ship From:		Vendu à / Sold To:		Expédié à / Ship To:		Livré à / Deliver To:	
Castle Metals MONTREAL 835-SELKIRK AVENUE POINTE CLAIRE, QUEBEC H9R 3S2		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7		DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date d'expédition / Date Shipped	F.O.B.	Modalités de transport / Freight Terms		Transporteur / Carrier		N° du Bon de connaissance / BOL No	N° de livraison / Delivery No
08-JUN-09	ORIGIN	Prepaid		LOCAL_FLEET		11845-10	2822042

Détails d'expédition / Shipment Details	Destination finale / Final Destination Branch - MON
---	---

N° de commande / Order No	N° de ligne Line No	N° d'article / Item No	Description		
197018	1	6879.MO	2.5000.PL.7075.T7351.ALUMINUM.48.5000.144.5000 CUT 2SIDED TO 8.25 IN () X 5 IN ()		
N° de bon de commande / Purchase Order No	Nbre de pièces / Part Number		Qté commandée / Ordered Qty	Qté Facturée / Invoice Qty	Solde à livrer / Backorder Qty
8393			50 PCS	50 PCS	

Détails / Details						
Usine / Mill	No de coulée / Heat Number	Code méc / Mech Id	Pièces / PCS	Largeur (Pouce) / Width (IN)	Longueur (Pouce) / Length (IN)	Qté expédiée / Shipped Qty (LBS)
	449115A5		4			41.67
	449115A5		46			479.21

Ces marchandises/technologies sont sujettes aux règlements de l'Export Administration et du département d'état des États-Unis. Si elles ont été/sont exportées, elles doivent se conformer à ces règlements. Toute modification du contrat de transport contraire aux lois des États-Unis est interdite.
These commodities/technologies are subject to US Export Administration & US State Dept. Regulations and, if intended for export, ware/are exported thereunder. Diversion contrary to US Law is Prohibited.

Nous certifions par la présente que le matériel couvert par cette certification est conforme aux spécifications susmentionnées et aux exigences applicables pour le matériel, y compris toute spécification faisant partie de la description. Les rapports d'essai sont archivés pour fins de consultation. Toute requête concernant du matériel défectueux sera rejetée à moins qu'elle ne soit faite par écrit à A. M. Castle & Co. dans les 60 jours suivant la livraison. Le matériel coupé sur mesure ou coupé par le client ne peut être retourné pour crédit.
We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Ce matériel a été reçu et inspecté par This material has been received and inspected by:	Date:
---	-------

SHIP TO:

A M CASTLE & CO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

KAISER ALUMINUM

Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number
4143976

SOLD TO:

AM CASTLE & CO- SOLD TO
3400 NO. WOLF ROAD
FRANKLIN PARK, IL 60131

CUSTOMER PO NUMBER: 01-14052	WORK PACKAGE:	CUSTOMER PART NUMBER: 8879 A97075-60	SHIP RUN/LOAD ID: 101388/8	GOV'T CONTRACT NUMBER:		
KAISER ORDER NO: 1073780	LINE ITEM: 1	SHIP DATE: 9-OCT-2008	ALLOY: 7075	CLAD: BARE	TEMPER: T7351	PRODUCT DESCRIPTION: MILL FINISH PLATE
WEIGHT SHIPPED: 3624 LB	QUANTITY: 2 PCS EST.	S/L NUMBER: 2019785	GAUGE: 2.5000 IN	WIDTH: 48.500 IN	LENGTH: 144.500 IN	

Certified Specifications

AMS 4078/RevG
ASTM B 208/Rev07
B88 7055/RevA
DPS 4.713/RevAH
GSS16100/RevG

AMS-QQ-A-250/12
ASTM B 594/Rev06
CMMP 025/RevR
EAC M81011/RevE
MMS 159/RevN

AMS-STD-2154
BAC 5439/RevH
CSTI 006/RevC
GAMPS 9101/RevB
PS 21211/RevK

Test Code: 4297

Test Results

Lot: 449115A5 Cast 190

Drop 37

Ingot 3

Solubility

(ASTM E8/B557)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T7351	LT / 2 (Min:Max)	69.6 : 70.3 (480 : 485)	68.1 : 69.2 (401 : 408)	10.6 : 10.6

(ASTM E1004)

Conductivity %IACS :	41.4 Min	41.4 Max
(MS/M) :	24.0 Min	24.0 Max

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual	0.10	0.20	1.6	0.04	2.5	0.21	5.8	0.02	0.01	0.01	TOT 0.05


ALLOY LIMITS

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
7075 MIN	0.00	0.00	1.2	0.00	2.1	0.18	6.1	0.00	0.00	0.00	EACH	0.05
MAX	0.40	0.50	2.0	0.30	2.9	0.25	6.1	0.20	0.05	0.05	TOT	0.15

Aluminum Remainder

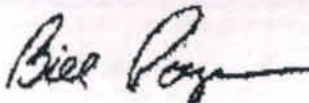
**KAISER
ALUMINUM**Trentwood Works - Spokane, WA 99215
Phone: (800) 367-2586**CERTIFIED TEST REPORT**Serial Number
4143976**TEST NOTES**

Metal represented by this test report was immersion
ultrasonically tested from one side and meets the Class A
and Class B requirements of all specifications referenced
on this test report.

CASTLE METALS CORP.
DATE RCVD 10/14/08
IAC 0819
APPROVED BY 

CERTIFICATION

KAISER ALUMINUM FABRICATED PRODUCTS, LLC (KAISER) HEREBY CERTIFIES THAT METAL SHIPPED UNDER THIS ORDER WAS MELTED IN THE U.S.A OR CANADA AND MANUFACTURED IN THE U.S.A. AND HAS BEEN INSPECTED, TESTED, AND FOUND IN CONFORMANCE WITH THE REQUIREMENTS OF THE APPLICABLE SPECIFICATIONS AS INDICATED HEREIN. ALL METAL WHICH IS SOLUTION HEAT-TREATED COMPLIES WITH AMS 2772. ANY WARRANTY IS LIMITED TO THAT SHOWN ON KAISER'S STANDARD GENERAL TERMS AND CONDITIONS OF SALE. TEST REPORTS ARE ON FILE, SUBJECT TO EXAMINATION. TEST REPORTS SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT THE WRITTEN APPROVAL OF ALUMINUM FABRICATED PRODUCTS, LLC LABORATORY. THE RECORDING OF FALSE, FICTITIOUS, OR FRAUDULANT STATEMENTS OR ENTRIES ON THE CERTIFICATE MAY BE PUNISHED AS A FELONY UNDER FEDERAL LAW. ISO-9001:2000 CERTIFIED

BILL POYNOR, LABORATORIES SUPERVISOR

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA

DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material meet the composition limits and had the mechanical properties shown on the face of this sheet.

Malcolm Murphy

Malcolm Murphy
Director of Manufacturing Davenport Works

Kenton P. Young

Kenton P. Young
Quality Assurance Manager

991917 Ship Date	0 B.L. No.	Invoice No.	Alcoa No.	Item	Page
2009-01-10	3286081	00000	1000062304-1		1
P.O. No./Govt Contract No.	Customer	Alcoa Item	Mfg Order		
01-16542	CASTLE A M	0041005634R08	DS-62304-1		

Ship To: A M CASTLE & COMPANY
3400 NORTH WOLF ROAD
BAY #6
FRANKLIN PARK 60131 IL

Item Description
2.5 IN TK (+.0750 -.0750) X 48.5 IN W (+.3125 -
0.000) X 144.5 IN LN (+.5 -0.0) CAT D 164168 (N) A/T 7075-
T7351 RECTANGLE MILL FINISH, US1 3MM DEAD ZONE REQ'D BOTH SIDES,
SAWED IAC 6879. EXC MRK A97075-60 REV 22 AMS-QQ-A-250/12 IS 2007 AMS-
STD-2154 EXC MRK AMS4078 REV G EXC MRK ASTM209
REV 07 ASTM5594 REV 06 BSS7055 REV A
EXC MRK MMS159 REV N PS21211 REV K ((MARKED))
KRAFT PAPER INTERLEAVED
MAX GROSS SKID WGT: 4500 LB QUAN TOL +/-
25 % US1 CL A 3 MM CQR 0137890 REV 17 CUST REQ 08-11-
04 *** W/E 09-01-17 ***

Num	Package Ticket	Lot	Weight	Quantity	UOM	Pc Id/Serl
1	709656	407251	3545	2	PC	

Notes for CQR: 0137890.17
PRODUCT PRODUCED TO THE REQUIREMENTS OF ASTM2375 ALSO MEET THE REQUIREMENTS OF AMS-STD-2154. PRODUCT PRODUCED TO THE
REQUIREMENTS OF AMS-STD-2154 ALSO MEET THE REQUIREMENTS OF ASTM2375.
THIS MATERIAL HAS BEEN ULTRASONICALLY INSPECTED FULLY IMMERSION - TYPE I.
PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/12 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/12P. PRODUCT
PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/12 F ALSO MEETS THE REQUIREMENTS OF AMS-QQ-A-250/12.
Exception to Spec A97075-60 ; Reven: 22 Issue: Letter dated 2007-05-14 from AHERN, DENNIS T to PLATNER, BARB .

CQR: 0137890.17 -Specification Limits

Temp	Dir	UTS	TYS	ELAD
		KSI	KSI	PCT
T7351	Long Transv.	Max	63.9	
		Min	52.0	6
T7351	Elec. Cond. (ZC)	% MIN 38.0 PCT		

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other	Other	Aluminum
Max	0.40	0.50	2.0	0.30	2.9	0.28	6.1	0.20	0.05	0.15	
Min			1.2		2.1	0.18	5.1				REMAIN

JAN-14-2009 10:56

AM CASTLE METALS

8474568927

P.017

CERTIFIED INSPECTION REPORT

Alcoa Inc.

PITTSBURGH, PA

DAVENPORT WORKS

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet, the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

Per:

Malcolm Murphy
Director of Manufacturing Development Works

Kenton P. Young
Quality Assurance Manager

993937	0				
Ship Date	B.L. No.	Invoice No.	Alcoa No.	Item	Page 2
2009-01-10	3286081	00000	1000062304-1		
P.O. No./Govt Contract No.	Customer	Alcoa Item	Mfg Order		
01-16542	CASTLE A M	G041005634R08	DS-62304-1		

CQR: 0137890.17 -Specification Limits (cont.) -----
Lot: 407251 - Mechanical, Physical, Metallography, Quantometer Results -----

Temp	Dir	No->	UTS	TYS	ELAD
		Test	KSI	KSI	PCT
T7351	Long Transv.	3	69.8	58.3	10.3
			69.8	58.2	10.4
			69.8	57.8	10.2

T7351 Elect Cond %IACS 40.4 40.7 40.5 PCT

Cast Number	Chemical - OES	SI	FB	CU	MN	MG	CR	ZN	TI
H9127044	Actuals	0.06	0.29	1.6	0.02	2.5	0.19	5.7	0.02

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

CASTLE METALS CORP
DATE RCVD 1/14/09
IAC 0879
APPROVED BY [Signature]

JAN-14-2009 10:56

AM CASTLE-METALS

8474568927

P.018

Dart Aerospace Ltd

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613) 632-3336
Fax: (613) 632-4443

Receiving Slip

Date Jun 10, 2009	Page 1
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Receipt Number RCP00011216

Purchase From:

Metaux Castle
A.M. Castle & Co. (Canada) Inc. - Box B9204
P.O. Box 9100
Toronto, ON M4Y 3A5

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
BLANKET P.O			VC-MET001	PO00008393

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	D6101001P	7075-T7351 2X6X6.25 B46409 GRAIN DIRECTION ALONG 6.00" LENGTH TOLERANCE ON LENGTH ARE +0.025" / -0.000" SIZE: 6.00" X 6.250" X 2.00" THICK ALUMINUM BILLET MATERIAL: 7075-T7351 (QQ-A-250/12	50.0000	Each	45.100000	2,255.00	Jun 10, 2009
	D6101003P	7075-T7351 2X6.25X7.875 B46410 GRAIN DIRECTION ALONG 7.875" LENGTH TOLERANCE ON ALL DIMENSION ARE +0.030" / -0.000" SIZE: 7.875" X 6.250" X 2.00" THICK ALLUMINUM BILLET MATERIAL: AS ABOVE	50.0000	Each	59.160000	2,958.00	Jun 10, 2009
	D6101005P	7075-T7351 8.25X5.0X2.5 B46411 GRAIN DIRECTION ALONG 5.00" LENGTH TOLERANCE ON ALL DIMENSION ARE +0.030" / -0.000" SIZE: 5.00" X 8.250" X 2.50" THICK ALLUMINUM BILLET MATERIAL: AS ABOVE	50.0000	Each	61.000000	3,050.00	Jun 10, 2009
	D6101007P	7075-T7351 8.25X7.75X2.5	50.0000	Each	95.000000	4,750.00	Jun 10, 2009

Continued on next page...

Dart Aerospace Ltd

Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7
Phone: (613) 632-3336
Fax: (613) 632-4443

Receiving Slip

Date Apr 2, 2009	Page 1
Receipt Number RCP00010636	

Purchase From:

Metaux Castle
A.M. Castle & Co. (Canada) Inc. - Box B9204
P.O. Box 9100
Toronto, ON M4Y 3A5

Ship To:

Main Finished Goods Location
Dart Aerospace Ltd
1270 Aberdeen St
Hawksbury, Ontario K6A 1K7

Reference	Description	Contact	Vendor Number	PO Number
BLANKET P.O			VC-MET001	PO00008393

Vendor Item Number	Item Number	Description	Qty. Received	UOM	Unit Cost	Extended Cost	Arrival Date
	D6101001P	7075-T7351 2X6X6.25 B46409 GRAIN DIRECTION ALONG 6.00" LENGTH TOLERANCE ON LENGTH ARE +0.025" / -0.000" SIZE: 6.00" X 6.250" X 2.00" THICK ALUMINUM BILLET MATERIAL: 7075-T7351 (QQ-A-250/12 B/N46409	50.0000	Each	45.100000	2,255.00	Apr 02, 2009
	D6101003P	7075-T7351 2X6.25X7.875 B46410 GRAIN DIRECTION ALONG 7.875" LENGTH TOLERANCE ON ALL DIMENSION ARE +0.030" / -0.000" SIZE: 7.875" X 6.250" X 2.00" THICK ALLUMINUM BILLET MATERIAL: AS ABOVE B/N46410	50.0000	Each	59.160000	2,958.00	Apr 02, 2009
	D6101005P	7075-T7351 8.25X5.0X2.5 B46411 GRAIN DIRECTION ALONG 5.00" LENGTH TOLERANCE ON ALL DIMENSION ARE +0.030" / -0.000" SIZE: 5.00" X 8.250" X 2.50" THICK ALLUMINUM BILLET MATERIAL: AS ABOVE B/N46411	50.0000	Each	61.000000	3,050.00	Apr 02, 2009
	D6101007P	7075-T7351 8.25X7.75X2.5 B46411 GRAIN DIRECTION ALONG 5.00" LENGTH TOLERANCE ON ALL DIMENSION ARE +0.030" / -0.000" SIZE: 5.00" X 8.250" X 2.50" THICK ALLUMINUM BILLET MATERIAL: AS ABOVE B/N46411	50.0000	Each	95.000000	4,750.00	Apr 02, 2009

Continued on next page...